

DETAILED ACTION

1. This action is in response to the Appeal Brief filed on 05/17/2010. After through search, application history, double patenting issues and in light of the prior arts made of the record, claims 1-2, 4-7, 9-17, 19-22, and 24-30 are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and email with Applicant's representative Eliot Malamud (Reg. No. 51989) on 06/15/2010.

Please amend the claims, which were filed on 01/06/2009 with new version as following:

1. **(Currently Amended)** A method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based method and a TCP/IP (Transmission Control Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center (MPC), a home location register (HLR), and a position determination Entity (PDE), comprising the steps of:

a terminal connecting to a client server for being provided a location based service (LBS);

said client server carrying out an authentication and selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS

communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method;

in case of a TCP/IP-based method being selected, said client server transmitting a PDE URL to MS, and then sending an information by a signal to MPC; and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC;

said MPC transmitting a request signal for the information of said MS to HL and receiving the response;

after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE;

said PDE obtaining the location information of said MS from said MS by the selected type of method; and

said PDE transmitting the obtained location information of said MS to said client server through said MPC;

wherein said step of selecting one of said DBM-based method and said TCP/IP-based method includes said client server selecting said TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information is to be provided, and otherwise, said client server selecting said DBM-based method; and

wherein said corresponding information, contained in said signal being transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains the information on the type of method selected by said client server and the information on the mobile switching center(MSC) controlling said MS.

2. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

wherein said terminal connecting to said client server is a terminal able to connect to a client server using a wireless application protocol(WAP) such as a cellular phone, a personal digital assistant(PDA), or the like.

3. **(Canceled).**

4. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS through the communication line, using WAP, established already.

5. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS using a short message service(SMS).

6. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said signal, sent to said MPC, from said client server contains the information on the selected type of method for providing the service.

7. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said information of MS, requested by said MPC to said HLR, contains the number of said MS and the information on the mobile switching center (MSC) controlling said MS.

8. **(Canceled).**

9. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a DBM-based method, said PDE that received said signal transmitted by said MPC requesting a GPS location information of said MS to said MS; and

said MS that received said request transmitting the GPS location information to said PDE.

10. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 9, wherein the transmission/reception of the information between said PDE and said MS is being carried out by SMS-based communication complying with IS-801-1 standard.

11. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, wherein said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a TCP/IP-based method, said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL; and

said MS that connected to said PDE providing its own GPS location information to said PDE.

12. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11,

wherein said step of said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL includes the step of said PDE that received a signal transmitted by said MPC waiting for said connection by said MS.

13. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11, wherein said step of said MS that connected to said PDE providing its own GPS location information to said PDE comprises the steps of:

said PDE requesting a GPS location information to said MS connected to said PDE; and
said MS providing the GPS location information to said PDE in response to said request.

14. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11, wherein that the transmission/reception of the information between said PDE and said MS is being carried out by TCP/IP-based communication complying with IS-801-1 standard.

15. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, further comprising, after the step of said PDE transmitting the location information of said MS to said client server through said MPC, the step of providing a corresponding location based service(LBS) requested by said terminal connected to said client server by using said location information of said MS received by said client server.

16. **(Currently Amended)** A method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based method and a TCP/IP (Transmission Control Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center (MPC), a home location register (HLR), and a position determination Entity (PDE), comprising the steps of:

a terminal connecting to a client server for being provided a location based service (LBS);

said client server carrying out an authentication and selecting a method among a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method,

wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method;

in case of a TCP/IP-based method being selected, said client server sending an information by a signal to MPC, and then transmitting a PDE URL to MS; and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC;

said MPC transmitting a request signal for the information of said MS to HLR and receiving the response;

after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE;

said PDE obtaining the location information of said MS from said MS by the selected type of method; and

said PDE transmitting the obtained location information of said MS to said client server through said MPC;

wherein said step of selecting one of said DBM-based method and said TCP/IP-based method, said client server selects said TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information is to be provided, and otherwise, said client server selects said DBM-based method; and

wherein said corresponding information, contained in said signal transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains information on the type of method selected by said client server and the information on the mobile switching center(MSC) controlling said MS.

17. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

wherein said terminal connecting to said client server is a terminal able to connect to a client server using a wireless application protocol(WAP) such as a cellular phone, a personal digital assistant(PDA), or the like.

18. **(Canceled).**

19. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS through the communication line, using WAP, established already.

20. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS using a short message service(SMS).

21. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said signal, sent to said MPC from said client server contains the information on the selected type of method for providing the service.

22. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said information of MS, requested by said MPC to said HLR, contains the number of said MS and the information on the mobile switching center (MSC) controlling said MS.

23. **(Canceled).**

24. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a DBM-based method, said PDE that received said signal transmitted by said MPC requesting a GPS location information of said MS to said MS; and

said MS that received said request transmitting the GPS location information to said PDE.

25. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 24, wherein the transmission/reception of the information between said PDE and said MS is being carried out by SMS-based communication complying with IS-801-1 standard.

26. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, wherein said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a TCP/IP-based method, said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL; and

said MS that connected to said PDE providing its own GPS location information to said PDE.

27. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26, wherein said step of said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL includes the step of said PDE that received a signal transmitted by said MPC waiting for said connection by said MS.

28. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26,

wherein said step of said MS that connected to said PDE providing its own GPS location information to said PDE comprises the steps of:

said PDE requesting a GPS location information to said MS connected to said PDE; and
said MS providing the GPS location information to said PDE in response to said request.

29. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26, wherein the transmission/reception of the information between said PDE and said MS is being carried out by TCP/IP-based communication complying with IS-801-1 standard.

30. **(Currently Amended)** A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16, further comprising, after the step of said PDE transmitting the location information of said MS to said client server through said MPC, the step of providing a corresponding location based service(LBS) requested by said terminal connected to said client server by using said location information of said MS received by said client server.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: The closest prior art of record US Patent No. 6,716,101, Meadows et al. teach a system for monitoring the geographical location of a subscriber's mobile cellular telephone, and for providing the location information to an authorized user through the world wide web (see at least abstract).

4. Sheynblat, US Patent No. 6,677,894, teaches a method and apparatus for distributing location-based information (i.e. information specific to a client's location or a location of interest to the client etc. (see abstract). Lim et al . US Patent No. 6,259, 923, like wise provides a method for providing cell location service in digital mobile communication network, without additional device for cell location service etc. (see abstract). In Applicant's invention, "selecting one of a

DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method; and wherein said step of selecting one of said DBM-based method and said TCP/IP-based method, said client server selects said TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information is to be provided, and otherwise, said client server selects said DBM-based method; and wherein said corresponding information, contained in said signal transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains information on the type of method selected by said client server and the information on the mobile switching center(MSC) controlling said MS", as claimed in independent claims 1 and 16, are not taught or suggested by any of the cited references.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:30AM-5:00PM.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C./
Examiner, Art Unit 2444
/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444